CLAIMS

A process for preparing a compound represented by the following formula
 or its salt, which comprises reacting a compound represented by the following formula
 with a compound represented by the following formula 3 in the presence of a base:

HO
$$\stackrel{\text{NHR}^1}{\longrightarrow}$$
 $\stackrel{\text{H}}{\longrightarrow}$ $\stackrel{\text{S}}{\longrightarrow}$ $\stackrel{\text{R}^2}{\longrightarrow}$ $\stackrel{\text{O}}{\longrightarrow}$ $\stackrel{\text{R}^2}{\longrightarrow}$ $\stackrel{\text{O}}{\longrightarrow}$ $\stackrel{\text{R}^3}{\longrightarrow}$ $\stackrel{\text{(1)}}{\longrightarrow}$

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$$R^2$$
 R^2
 R^3
 R^3

wherein R¹ is a hydrogen or an amino protecting group, R² is methyl, propen-1-yl, or 1H-1,2,3-triazole-4-yl-thiomethyl, and R³ is a hydrogen or a carboxyl protecting group.

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- 2. The process of claim 1, wherein the compound of the formula 2 is an anhydride form.
- 3. The process of claim 1, wherein the compound of the formula 2 reacts with the compound of the formula 3 at an equivalent ratio of 1.1-1.5 to 1.
 - 4. The process of claim 1, wherein the compound of the formula 2 reacts with the compound of the formula 3 in a mixed solvent of water with an organic solvent

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selected from the group consisting of dimethylsulfoxide, dimethylformamide, dimethylacetamide, 1,4-dioxane, acetonitrile, dichloromethane, and a mixture thereof.

- 5. The process of claim 4, wherein in the mixed solvent, water is used in an amount of 0.05 to 0.3 parts by weight, based on 1 part by weight of the organic solvent.
 - 6. The process of claim 1, wherein the base is selected from the group consisting of N-methylmorpholine, triethylamine, diethylamine, n-tributylamine, N,N-dimethylaniline, and pyridine.

7. A compound represented by the following formula 2:

wherein R¹ is a hydrogen or an amino protecting group.

- 8. The compound of claim 7, which is an anhydride form.
- 9. A process for preparing a compound represented by the following formula 2, which comprises reacting a compound represented by the following formula 4 with dichlorotriphenylphosphorane in the presence of a base:

HO
$$OR^4$$
(4)

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wherein R¹ is a hydrogen or an amino protecting group, and R⁴ is hydrogen, sodium, or potassium.

- 10. The process of claim 9, wherein the compound of the formula 4 reacts with dichlorotriphenylphosphorane at an equivalent ratio of 1 to 1.1-1.5.
 - 11. The process of claim 9, wherein the compound of the formula 4 reacts with dichlorotriphenylphosphorane in an organic solvent selected from the group consisting of dichloromethane, acetonitrile, tetrahydrofuran, and a mixture thereof.
- 12. The process of claim 9, wherein the base is selected from the group consisting of triethylamine, diethylamine, n-tributylamine, N,N-dimethylaniline, and pyridine.
- 13. The process of claim 9, wherein dichlorotriphenylphosphorane is obtained by reaction between triphenylphosphine and hexachloroethane.
 - 14. The process of claim 13, wherein the reaction of triphenylphosphine and hexachloroethane and the reaction of the compound of the formula 4 and dichlorotriphenylphosphorane in the presence of a base are performed by one-pot reaction.
 - 15. A process for stereospecifically preparing a compound represented by the following formula 3a, which comprises a compound represented by the following formula 5 with acetaldehyde in a mixed solvent comprising water, isopropanol, and methylenechloride in a volume ratio of 1:3-6:11-14 in the presence of a base:

$$H_2N$$
 S O OR^3 $(3a)$

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wherein R^3 is a hydrogen or a carboxyl protecting group, and R^5 is a hydrogen or an amino protecting group.

16. The process of claim 15, wherein in the mixed solvent, water, isopropanol, and methylenechloride have a volume ratio of 1:4:12.